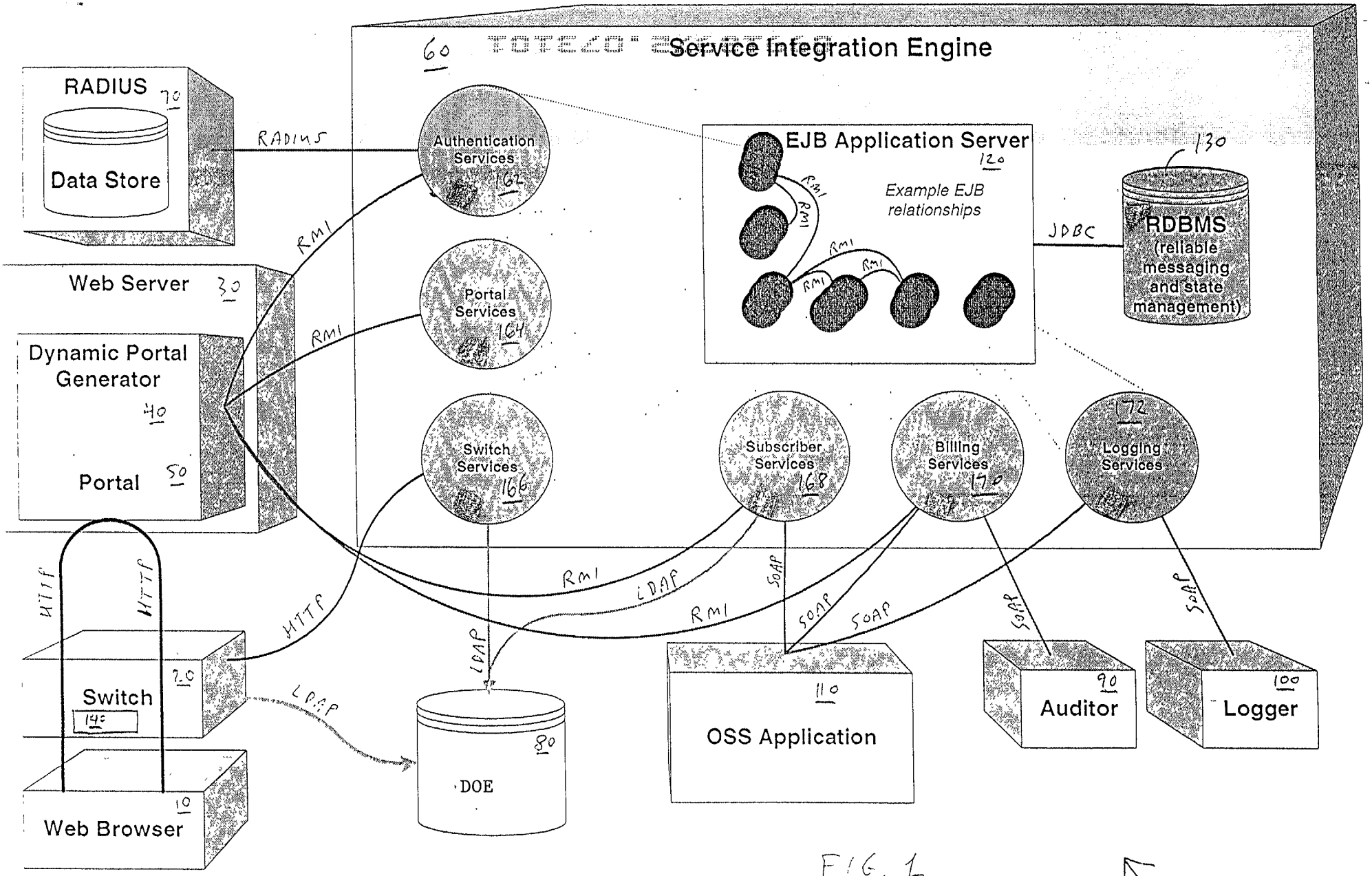
Service Integration Engine
60
RADIUS
70
Data Store
RADIUS
Authentication Services
162
EJB Application Server
120
Example EJB relationships
RMI
130
RDBMS
(reliable messaging and state management)
JDBC
Web Server
30
Portal Services
164
Dynamic Portal Generator
40
Portal
50
Switch Services
166
Subscriber Services
168
Billing Services
170
172
Logging Services
HTTP
HTTP
HTTP
RMI
LDAP
SOAP
SOAP
SOAP
SOAP
SOAP
Switch
20
14
LDAP
80
DOE
110
OSS Application
90
Auditor
100
Logger
10
Web Browser

FIG. 1

200

Top-Level Flow

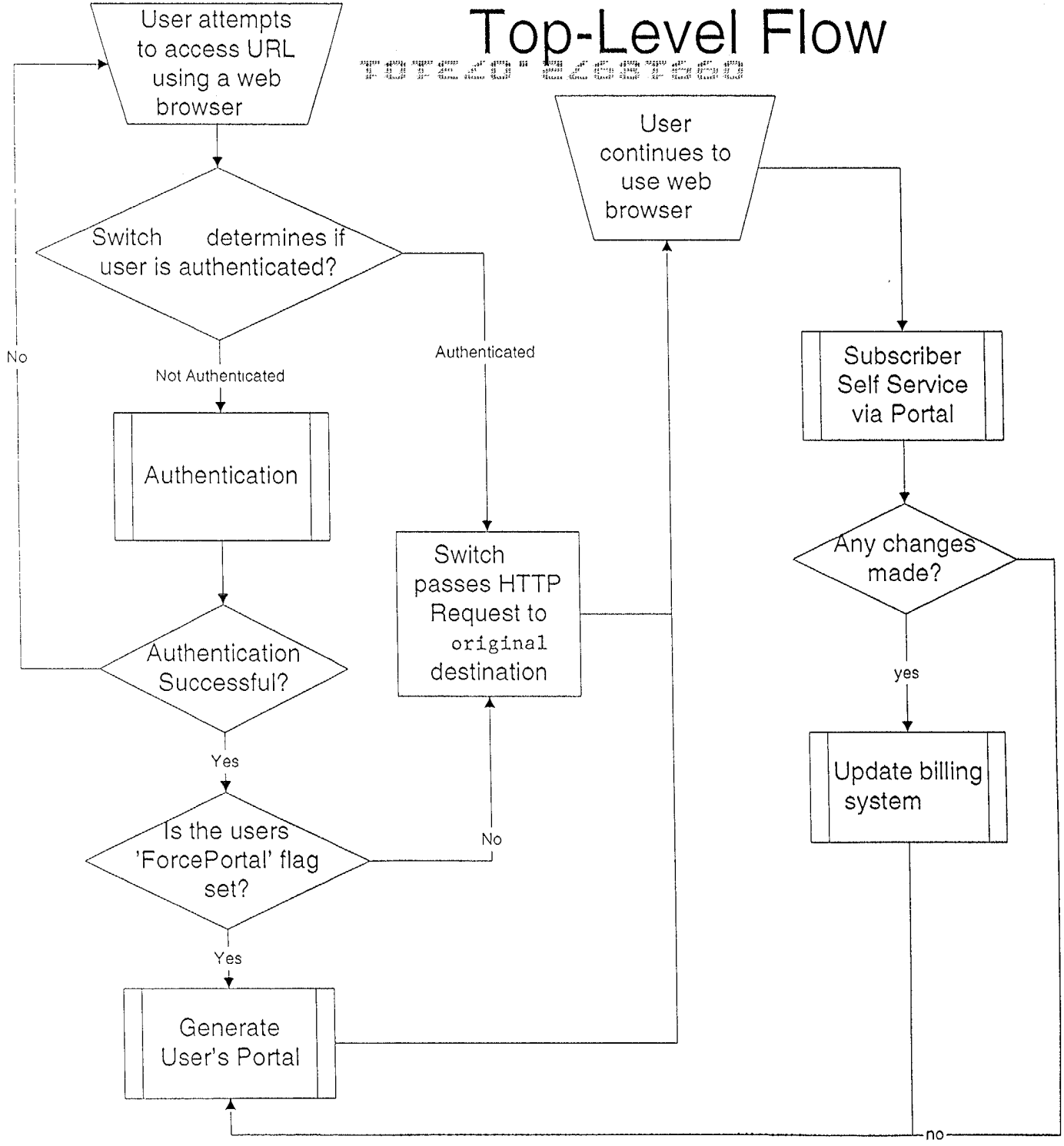

FIG. 2

PATENT-PENDING

Authentication

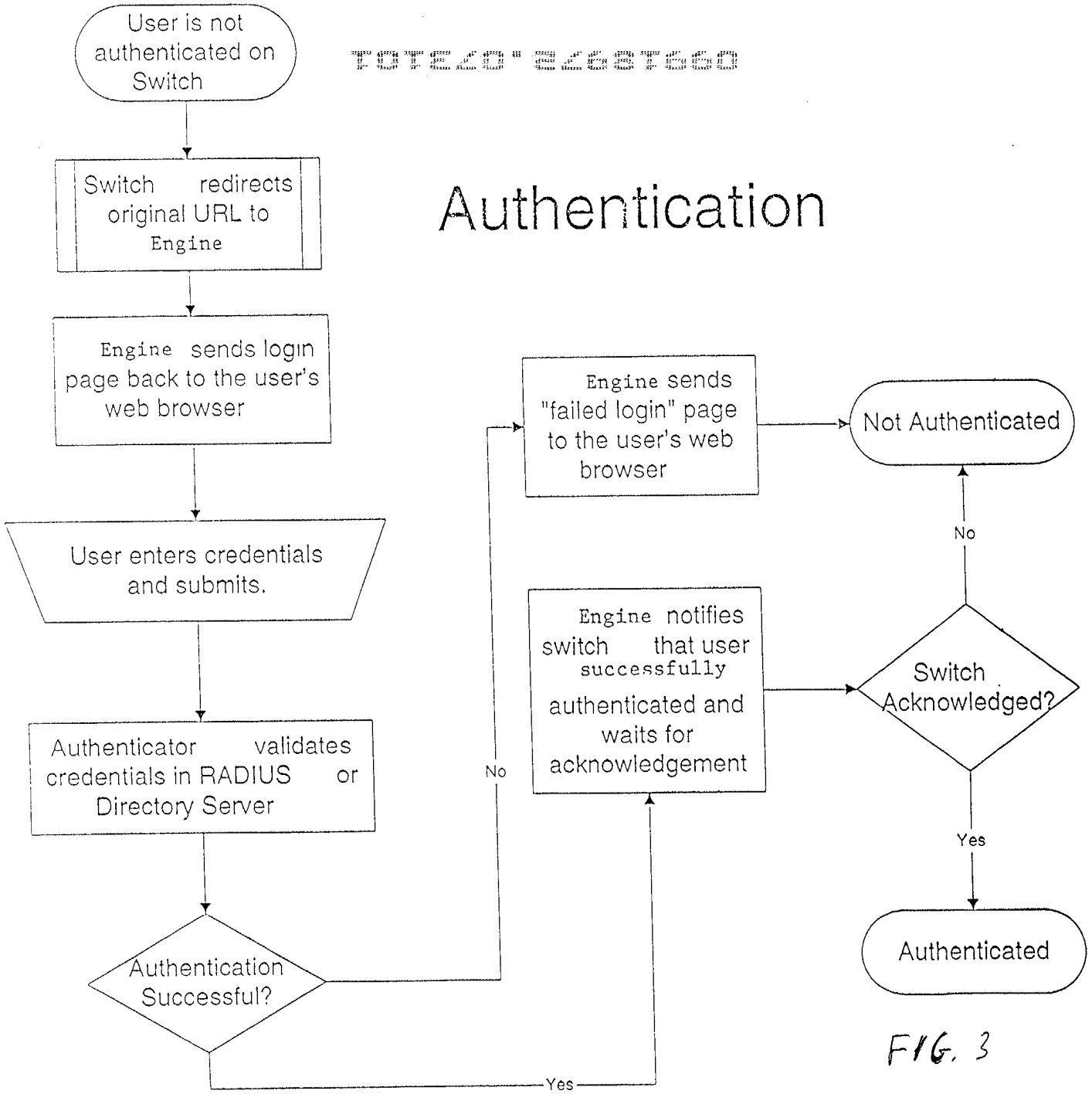

FIG. 3

PCT/US2003/000000

Generate User's Portal

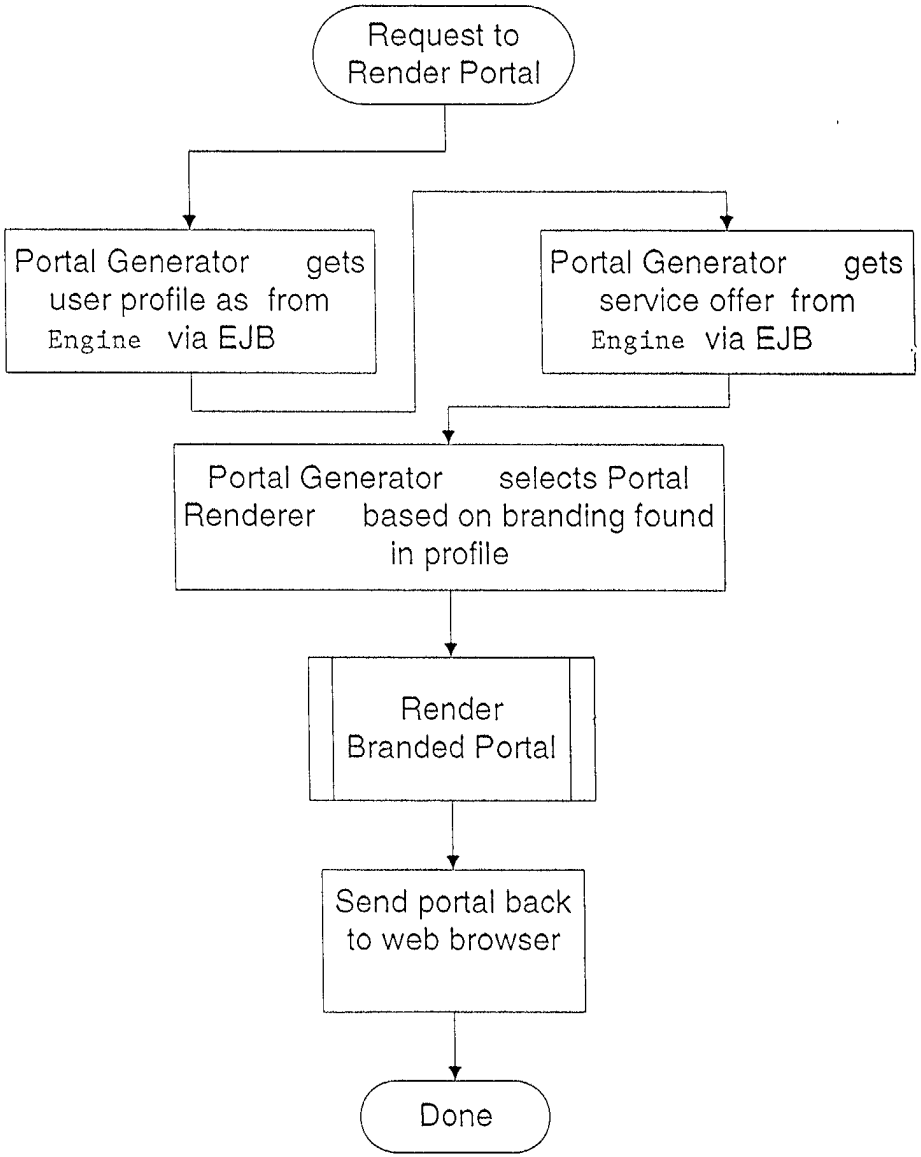

FIG. 4

Subscriber Self Service via Portal

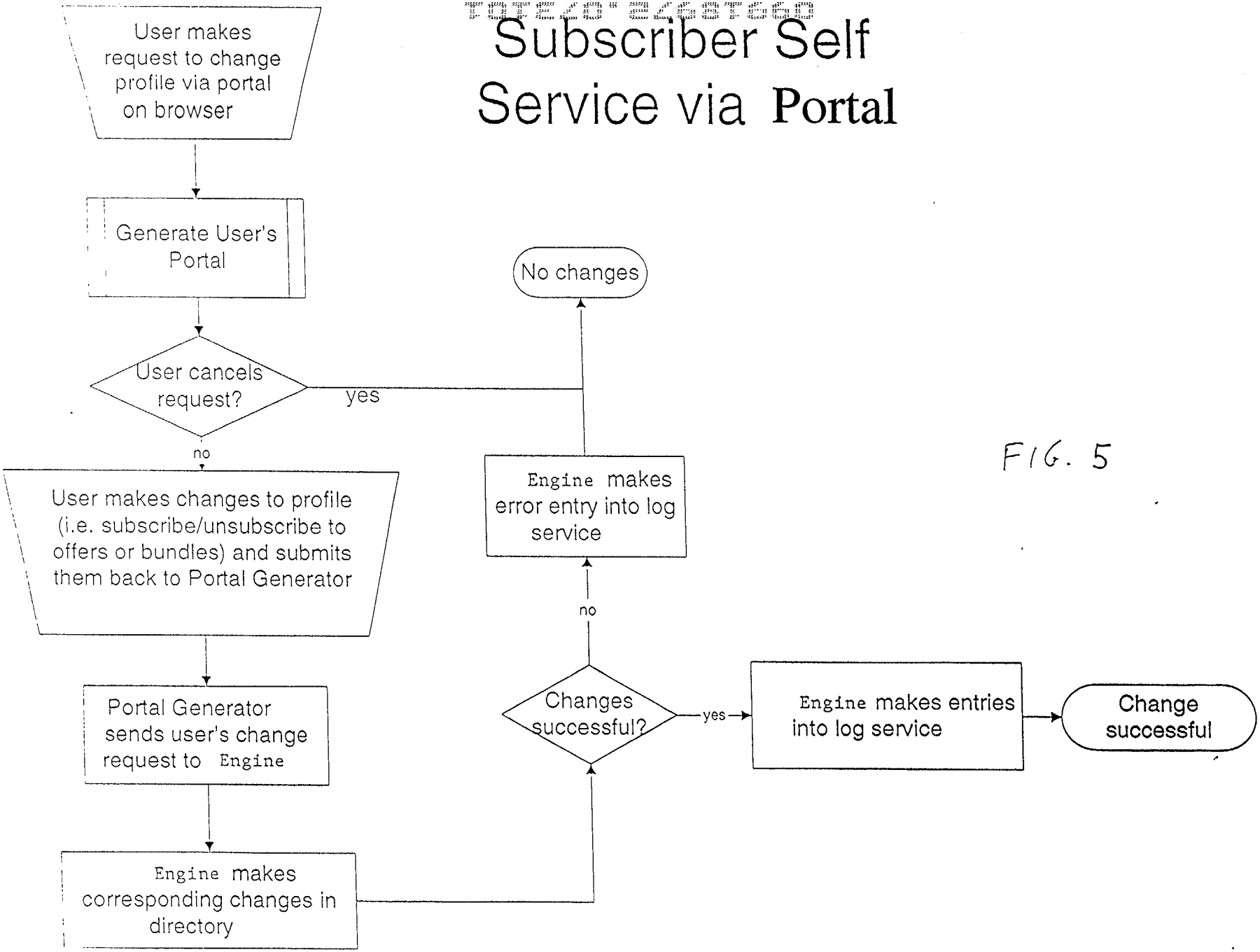

FIG. 5

Update Billing System

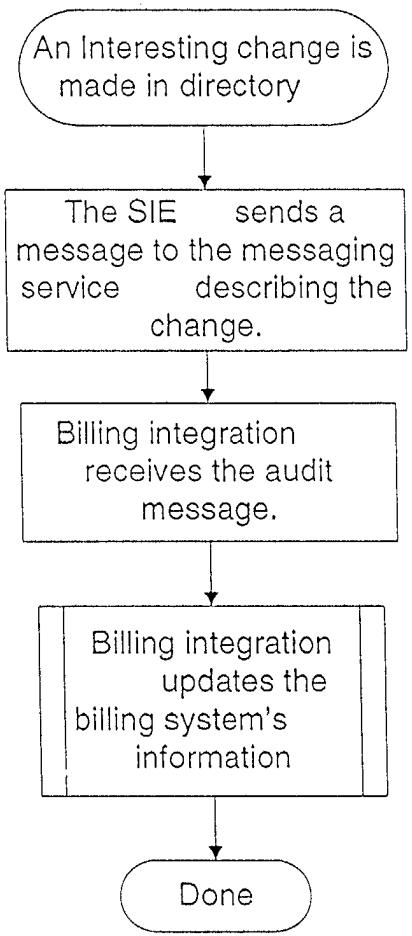

FIG. 6

Creating and Editing Service Elements

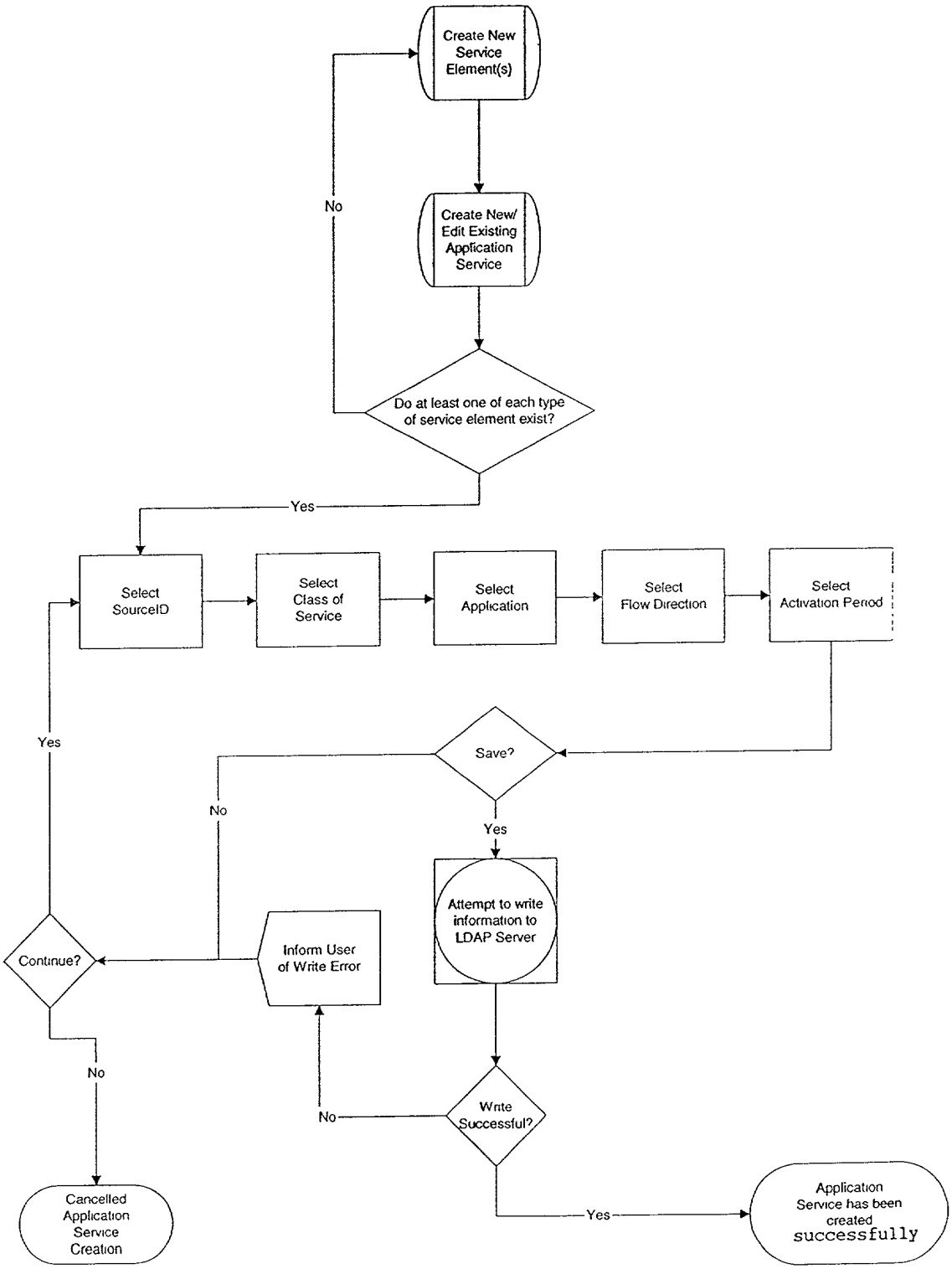

FIG. 7

Creating and Editing Service Bundles

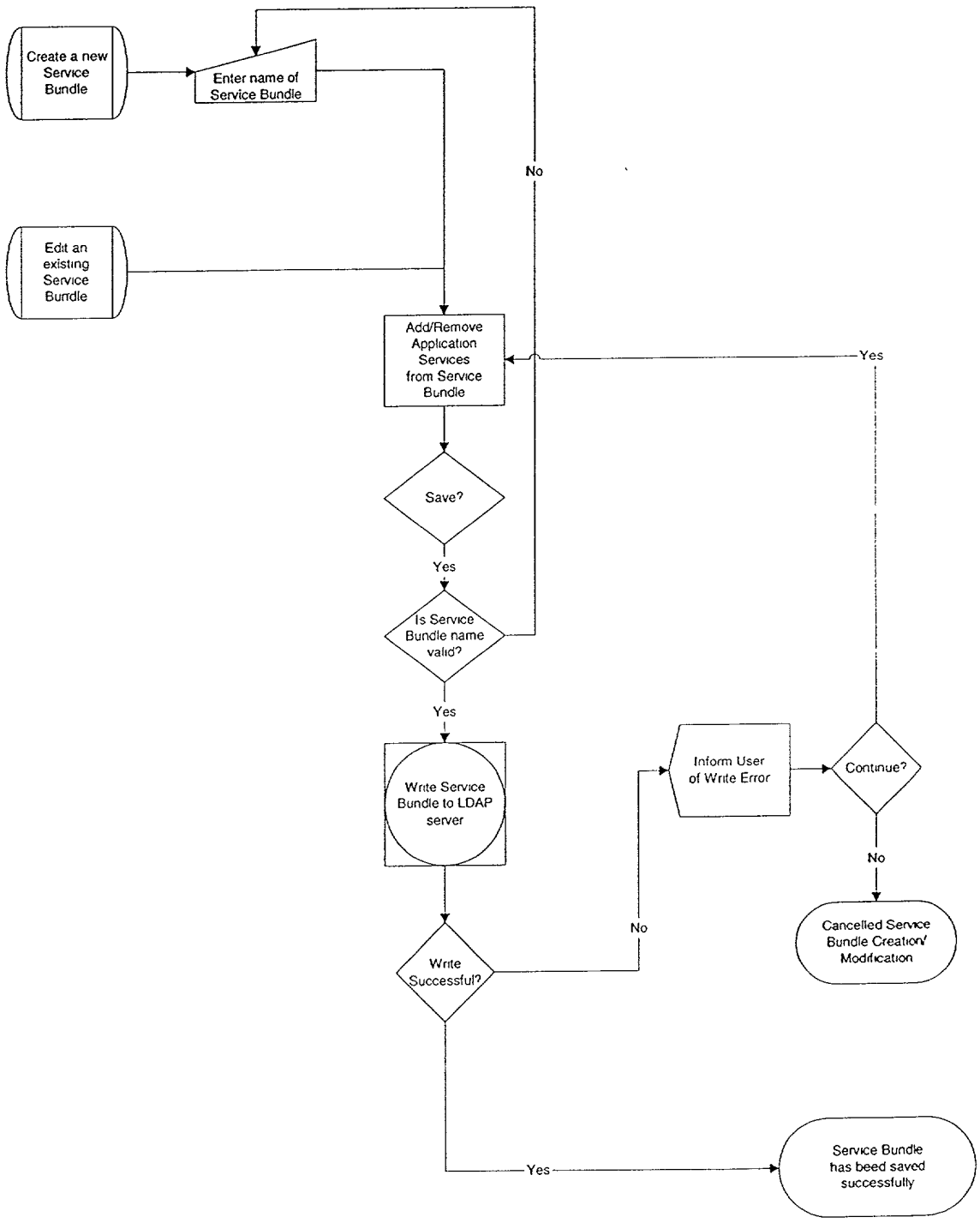

FIG. 8

Synchronizing Service Bundles and Network Policies

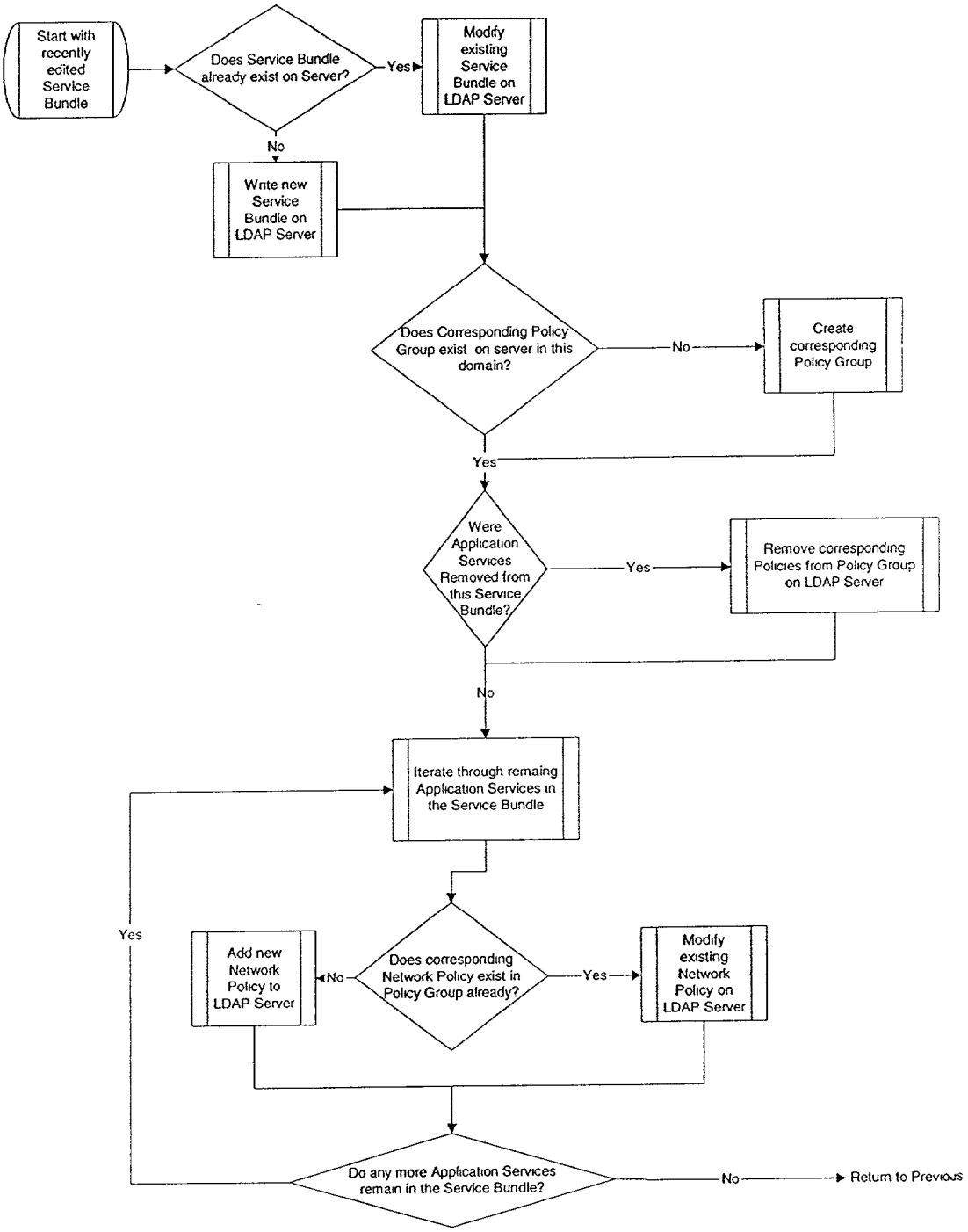

FIG. 9

Creating Virtual Domains

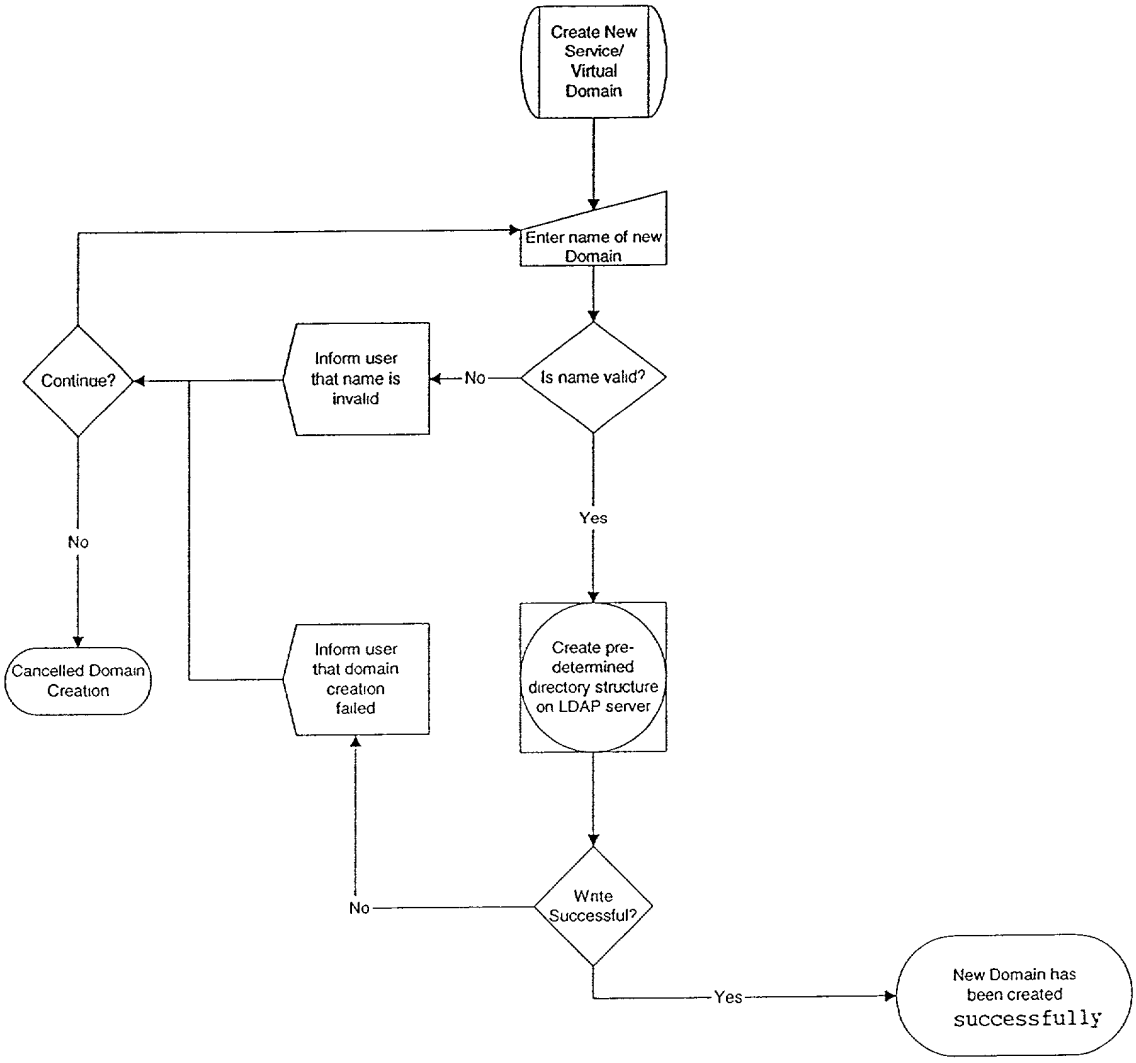

FIG. 10

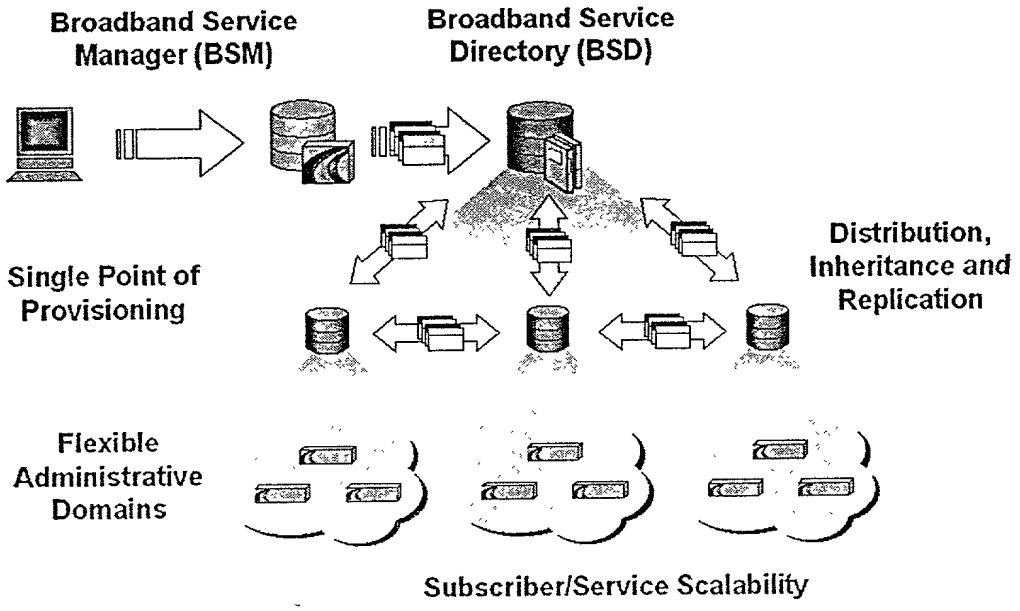
Broadband Service Manager (BSM)
Broadband Service Directory (BSD)
Single Point of Provisioning
Distribution, Inheritance and Replication
Flexible Administrative Domains
Subscriber/Service Scalability

FIG. 11

Directory Name	Sub-Directory Name	Function
Application Services		Contains Application Services
Configurations		Contains directories that hold Configuration information for the network
	Switches	Contains specific switch configuration information
	Switch Configurations	Contains generic (common) switch configuration information
	Policy Configuration	Contains policy configuration information (which are referenced by common switch configurations)
Network Devices		Contains IP devices discovered on the network by the switches.
Network Policies	(assorted Policy Group names)	Contains Network Policy objects that the switch reads and applies to its flows.
	Default (policy group)	The default policy group is always present to allow the switch to function if a Network manager has not yet set up any other bundles. It cannot be removed.
People	(assorted Subscriber Group names)	Contains information about Subscribers, and can contain other Subscriber Groups.
Service Bundles		Contains the Service Bundles that have been created by the Subscriber. A default Service Bundle is added upon the successful creation of a new Domain (see default policy group)
Service Elements		Contains directories that hold Service Elements
	Activation Periods	Contains Activation Periods. The "Always" activation period is added upon the successful creation of a new Domain.
	Class of Service	Contains Classes of Service. Several COS's are added upon the successful creation of a new Domain, including Deny, LowQos, MediumQos, HighQos, and CriticalQos.
	Flow Directions	Contains Flow Directions. As there are only 3 (Inbound, Outbound, and Bi-directional), they are all added upon the successful creation of a new Domain, and cannot be removed.
	Applications	Contains Applications.
	Sources	Contains SourceIDs. A "Dynamic" source is added upon the successful creation of a new Domain

• Table 1

FIG. 12